

ULTRASONIC CLEANING SOLUTION

Creation date	14th March 2022	Version	4.0
Revision date			

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier** ULTRASONIC CLEANING SOLUTION
Substance / mixture mixture
Number 1 35065 - spray
UFI FX12-3DS2-U00E-RRC9
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use
Cleaning agent.
For professional use only.
Mixture uses advised against
not available
- 1.3. Details of the supplier of the safety data sheet**
Supplier
Name or trade name RETECH, s.r.o.
Address Vackova 1541/4, Praha 5 - Stodůlky, 155 00
Czech Republic
Identification number (CRN) 25018205
VAT Reg No CZ25018205
Phone +420327596428
E-mail info@retech.cz
Web address www.retech.com
- Competent person responsible for the safety data sheet**
Name RETECH, s.r.o.
E-mail info@retech.cz
- 1.4. Emergency telephone number**
European emergency number: 112

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Aerosol 3, H229

Full text of all classifications and hazard statements is given in the section 16.

- 2.2. Label elements**

Signal word

Warning

Hazard statements

H229 Pressurised container: May burst if heated.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 Do not pierce or burn, even after use.
P261 Avoid breathing spray.
P271 Use only outdoors or in a well-ventilated area.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P501 Dispose of contents/container to in accordance with national regulations.

Supplemental information

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<5 % cationic surfactants

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients
3.2. Mixtures
Chemical characterization

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 112-27-6 EC: 203-953-2	2,2'-(ethylenedioxy)diethanol	5-10	not classified as dangerous	
Index: 603-002-00-5 CAS: 64-17-5 EC: 200-578-6 Registration number: 01-2119457610-43	ethanol	0,5-0,6	Flam. Liq. 2, H225 Eye Irrit. 2, H319 Specific concentration limit: Eye Irrit. 2, H319: C ≥ 50 %	
Index: 612-131-00-6 CAS: 7173-51-5 EC: 230-525-2	didecyldimethylammonium chloride	0,4-0,5	Acute Tox. 4, H302 Skin Corr. 1B, H314	
Index: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 Registration number: 01-2119457558-25	propan-2-ol	0,1-0,3	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	
Index: 606-002-00-3 CAS: 78-93-3 EC: 201-159-0	butanone	0,01-0,03	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	1

Notes

1 Substance with a Union workplace exposure limit.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures
4.1. Description of first aid measures

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards. In the event of unconsciousness, do not provide food by mouth. Remove contaminated clothes immediately.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Respiratory arrest - provide artificial respiration immediately. If aspiration into the lungs is suspected, e.g. when vomiting, admit to hospital immediately. In the event of issues, find medical advice.

If on skin

Remove contaminated clothes. Wash with plenty of soap and water.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

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If swallowed

Unlikely. Ensure calm environment for body and mind. Rinse out the mouth with clean water. Do NOT induce vomiting. If the affected person vomits, make sure to prevent inhalation of the vomit. Do not provide anything to eat or drink. Provide medical treatment. Bring an original container with the label and the Safety Data Sheet of the given substance as appropriate.

4.2. Most important symptoms and effects, both acute and delayed**If inhaled**

Not expected.

If on skin

Not expected.

If in eyes

Not expected.

If swallowed

Not expected.

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water. Dispose of contaminated extinguishing water and remains after the fire in accordance with the official regulations.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not inhale vapours. Provide sufficient ventilation. Use personal protective equipment for work. Remove all ignition sources. Do not eat, drink and smoke during work. Keep unprotected persons away. Vapors from gases are heavier than air. Prevent vapors from entering drains. Follow the instructions in the Sections 7 and 8.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Risk of formation of explosive vapours above water surface.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13.

6.4. Reference to other sections

See the Section 7, 8 and 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Provide sufficient ventilation. Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Do not inhale aerosols. No smoking. Use explosion-proof electrical equipment. Take action to prevent static discharges. Do not use compressed air for filling, emptying or another handling. Do not get in eyes, on skin, or on clothing. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Keep only in original packaging. Do not expose to temperatures exceeding 50 °C. Protect from sunlight. Use explosion-proof electrical equipment. Do not store in unlabelled containers. Protect against strong acids and oxidizing agents.

Content	Packaging type	Material of package
100 ml	pressure receptacle / gas container	

Storage temperature min 5 °C, max 40 °C

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

European Union

Commission Directive 2000/39/EC

Substance name (component)	Type	Value
butanone (CAS: 78-93-3)	OEL 8 hours	600 mg/m ³
	OEL 8 hours	200 ppm
	OEL 15 minutes	900 mg/m ³
	OEL 15 minutes	300 ppm

8.2. Exposure controls

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Hand protection: Protective gloves resistant to the product. Material of gloves: Nitrile rubber, NBR. Butyl rubber. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Wash contaminated reusable gloves with water before removing and store in a well-ventilated place. Other protection: protective workwear and footwear. Wash contaminated clothing before reuse.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Filter AX/P2. The protection provided by masks is in any case limited.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	characteristic

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Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	280 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	355 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	7-8,5 (undiluted)
Kinematic viscosity	47,8 mm ² /s at 20 °C
Solubility in water	soluble
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	0,935-1,03 g/cm ³ at 20 °C
Relative density	0,000655
Form	liquid
data not available	
9.2. Other information	
Evaporation rate	data not available
Content of organic solvents (VOC)	max.2 %

SECTION 10: Stability and reactivity
10.1. Reactivity

The product is stable and no degradation occurs under normal use.

10.2. Chemical stability

The product is stable under normal conditions. Keep away from heat, open flames.

10.3. Possibility of hazardous reactions

Reacts with strong acids and oxidizing agents.

10.4. Conditions to avoid

Protect against flames, sparks, overheating. Take action to prevent static discharges.

10.5. Incompatible materials

Protect against strong acids and oxidizing agents.

10.6. Hazardous decomposition products

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise.

SECTION 11: Toxicological information
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

2,2'-(ethylenedioxy)diethanol

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Oral	LD ₅₀		>2000 mg/kg		Rat	F/M
Dermal	LD ₅₀		18016 mg/kg		Rabbit	
Inhalation (dust/mist)	LC ₅₀		>5.2 mg/l	4 hour	Rat	F/M

ethanol

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Inhalation (vapor)	LC ₅₀		124.7 mg/l	4 hour	Rat	
Inhalation (vapor)	LC ₅₀		116.9 mg/l	4 hour	Rat	

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ethanol

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Inhalation (vapor)	LC ₅₀		133.8 mg/l	4 hour	Rat	

propan-2-ol

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Inhalation (vapor)	LC ₅₀	OECD 403	>10000 ppm	6 hour	Rat	F/M

Skin corrosion/irritation

Based on available data the classification criteria are not met.

Serious eye damage/irritation

Based on available data the classification criteria are not met.

ethanol

Route of exposure	Result	Method	Time of exposure	Species
	Irritating			Rabbit

propan-2-ol

Route of exposure	Result	Method	Time of exposure	Species
Eye	Serious eye damage	OECD 405		Rabbit

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

propan-2-ol

Route of exposure	Result	Time of exposure	Species	Sex
	Not sensitizing		Guinea-pig	F/M

Mutagenicity

propan-2-ol

Result	Time of exposure	Specific target organ	Species	Sex
Negative without metabolic activation, Negative with metabolic activation		Ovary	Guinea-pig	F/M

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

ethanol

Route of exposure	Parameter	Value	Result	Species	Sex
Oral			Indeterminate	Rat	

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Reproductive toxicity

Based on available data the classification criteria are not met.

ethanol

Effect	Parameter	Value	Result	Species	Sex
Effects on fertility	NOAEL	>16000 ppm	No effect	Rat	
	NOAEL	5200 mg/kg/24hour	Indeterminate	Rat	

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

ethanol

Route of exposure	Parameter	Value	Time of exposure	Specific target organ	Result	Species	Sex
Inhalation	LOAEL	2.6 mg/l	30 min	Nervous system	Drowsiness, Dizziness	Human	
Inhalation	LOAEL	9.4 mg/l		Lungs	Indeterminate	Human	

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

propan-2-ol

Route of exposure	Parameter	Value	Result	Species	Sex
Inhalation (vapor)	NOEC	500 ppm		Rat (<i>Rattus norvegicus</i>)	F/M

Aspiration hazard

Based on available data the classification criteria are not met.

11.2. Information on other hazards

not available

SECTION 12: Ecological information
12.1. Toxicity
Acute toxicity

Data for the mixture are not available.

2,2'-(ethylenedioxy)diethanol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
LC ₅₀		>10000 mg/kg	96 hour	Fishes (<i>Lepomis macrochirus</i>)		
LC ₅₀	OECD 203	69800 mg/l	96 hour	Fishes (<i>Oncorhynchus mykiss</i>)		
EC ₅₀		>10000 mg/kg	48 hour	Invertebrates (<i>Daphnia magna</i>)		

ethanol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
EC ₀		3.9 g/l	200 hour	Fishes		Experimentally
EC ₅₀		>10000 g/l	48 hour	Daphnia		Experimentally
IC ₅₀		8800 mg/l	96 hour	Algae		Experimentally

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propan-2-ol

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
EC ₅₀		>10000 mg/l	48 hour	Daphnia (Daphnia magna)		
LC ₅₀		9640 mg/l	96 hour	Fishes	Freshwater	

Chronic toxicity

2,2'-(ethylenedioxy)diethanol

Parameter	Value	Time of exposure	Species	Environment	Determining method
NOAEC	>15000 mg/kg	21 day	Daphnia (Daphnia magna)		

ethanol

Parameter	Value	Time of exposure	Species	Environment	Determining method
LC ₅₀	9248 mg/l	48 hour	Invertebrates		Experimentally
NOEC	250 mg/l	120 hour	Fishes (Oncorhynchus mykiss)		Experimentally
NOEC	1000 mg/l	120 hour	Fishes		Experimentally

12.2. Persistence and degradability
Biodegradability

2,2'-(ethylenedioxy)diethanol

Parameter	Method	Value	Time of exposure	Environment	Result
	OECD 301A	90-100 %	10 day		

The mixture is biodegradable.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations
13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification.

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Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended.
Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

16 05 04 gases in pressure containers (including halons) containing hazardous substances *
15 01 11 metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers *

Packaging waste type code

15 01 04 metallic packaging
17 04 05 iron and steel

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information**14.1. UN number or ID number**

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2 Gases

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

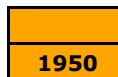
Additional information

Hazard identification No.

UN number

Classification code

Safety signs



5A

2.2

**Marine transport - IMDG**

EmS (emergency plan)

F-D, S-U

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents, as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

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A list of standard risk phrases used in the safety data sheet

H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Guidelines for safe handling used in the safety data sheet

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P261	Avoid breathing spray.
P271	Use only outdoors or in a well-ventilated area.
P501	Dispose of contents/container to in accordance with national regulations.

A list of additional standard phrases used in the safety data sheet

EUH066	Repeated exposure may cause skin dryness or cracking.
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Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
ES	Identification code for each substance listed in EINECS
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC ₅₀	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEL	Lowest observed adverse effect level
log K _{ow}	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail

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UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Acute Tox.	Acute toxicity
Aerosol	Aerosol
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Skin Corr.	Skin corrosion
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 4.0 replaces the SDS version from 22 June 2021. Changes were made in sections 2, 3, 7, 8, 11, 12, 13 and 16.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.